## Review

Crane, Eva 1999: The World History of Beekeeping and Honey Hunting. Nearly 500 illustrations. Gerald Duckworth & Co. Ltd. London. 682 pp. ISBN 07156 2827 5. Price £85.

Eva Crane was the director of the International Bee Research Association for 35 years, and has written (or edited) several books treating apiculture, including Honey: A Comprehensive Survey (1975); The Archaeology of Beekeeping (1983); Bees and Beekeeping: Science, Practice and World Resources (1990). Her newest book is an extensive work based on the author's personal studies, her vast experience with apiculture in various parts of the world, and considerably literary material on man's use of hees.

The book is divided into ten parts. Part I provides backround information on bees and other honey-storing insects, and also describes animals feeding on honey bees or their products. Parts II-IV deal with opportunistic honey hunting and a history of collecting honey from owned or tended (wild) nests. Parts V-VIII treat traditional beekeeping using fixed comb hives and beekeeping using a variety of more advanced hives. Part IX is a history of various bee products. Part X deals with bees in the human mind, such as bees and their products in world religions, the perception of gender in bees and also human gender roles (!) in relation to apiculture.

The honey bee (Apis mellifera) has the central role in this book, but the history of honey hunting and beekeeping of the Asiatic bees A. cerana, A. dorsata and A. florea, as well as stingless bees (Meliponinae) have been widely examined. The majority of stingless bee species live in South America and 55 species (or subspecies) of the genera Trigona and Melipona are known to have been kept in hives mainly in Central and South America, but also in Africa.

The author describes how humans have used honey for thousands of years: for food, sweeteners, medicine and even preserving a corpe. Honey is the oldest raw material for alcholic beverages and has probably been used for this purpose many thousands years longer than grapes or grain. Mead and alcoholic drink made from honey, is ancient, and also of great importance in Northern and Eastern Europe. In addition, the book contains an excellent account of the history of various uses of beeswax.

Beekeeping has a long history in Sweden and the author's description of its prosperity during the Middle Ages and the sixteenth century is mainly based on the recent study of Husberg (1994). Concerning the northern limit of wild-nesting honey bees in Sweden, the book includes assumption by Hansson (1955) that it corresponds with the northern limit of hazel (Corylus avellana) and a faulty map from Hansson's paper is also presented (Figure 9.5a). Hollow trunks of oak (Quercus robur) have perhaps been the most important nesting places for wild honey bee colonies in Northern Europe and it would seem much more probable that the northern limit of wild colonies would correspond with the north-

ern limit of oak, as suggested earlier by Köppen (1886, 1890) (not in bibliography).

A long and impressive history of tree beekeeping in Northeastern Europe is also treated. Tree beekeeping among the Finno-Ugrian peoples of northern Russia such as the Cheremissians (the Maris, who are not Tatars) has been described mainly on the basis of reports by the Finnish ethnographist Albert Hämäläinen from the beginning of the last century. The large and instructive study of Linnus (1939) on tree beekeeping in Estonia is (regrettably) reviewed only very briefly. There is no historical data about beekeeping in Finland before the eighteenth century, but according to a Russian author (Aristov 1866:36), a medieval document tells about primitive beekeeping in the area of Lake Ladoga. According to Galton (1971), Archangel is erroneously mentioned as having been an important area of tree beekeeping in Russia in the 1500s (p. 129, 130). Before the founding of St. Petersburg, Archangel was the most important Russian ocean port and large amounts of beeswax were exported from there, but tree beekeeping so far north (near the northern border on the middle boreal vegetational zone) was not possible.

In her Preface, the author writes that she has had the good fortune of being one of the first generation of people able to travel speedily and easily to distant countries, and she believes that her generation is also probably the last one to see the world's rich variety of traditional bee keeping. With this monumental synthesis, Dr Crane has greatly contributed to our knowledge of the history of honey hunting and beekeeping, activities which have been a notable and interesting source of livelihood for many human societies from prehistoric times to the present day.

Aristov, N. 1866: [Livelihoods of old Russia]. Sankt Peterburg. 324 pp. (In Russian)

Galton, D. 1971: Survey of a thousand years of beekeeping in Russia. — Bee Res. Assoc. London. 90 pp.

Hansson, Å. 1955: Finns honungsbiet kvar i vilt tillstånd i Norden? — Nordisk Bitidskr. 7: 123–126.

Husberg, E. 1994: Honung, wax och mjöd. Biodlingen i Sverige under medeltid och 1500-tal. — Avhandl. Hist. Inst. Göteborg 7. 397 pp.

Köppen, F. 1886: [Original home and relationships between Indo-Europeans and Finno-Ugrians]. — Sankt Peterburg. 125 pp. (In Russian)

Köppen, F. 1890: Ein neuer tiergeographischer Beitrag zur Frage über die Urheimat der Indoeuropäer und Ugrofinnen. — Ausland 63: 1001–1007.

Linnus, F. 1939: Eesti vanem mesindus I. — Eesti Rahva Museumi Aastaraamat 12–13. 495 pp.